

Journal Writing Prompts

This list was compiled from a variety of sources and is in no way exhaustive. These are merely presented as a way to start a journal writing program.

Mathematical Concept Prompts

- The difference between undefined slope and zero slope is...
- I think a linear relation is... (I thought a linear relation was...)
- Describe square root.
- What patterns did you notice in... (fractions, geometry, etc.)
- How do you use fractions in your life?
- Write a poem about numerators and denominators.
- List objects or figures in the room that have symmetry. How can you tell?
- Write your own definition of a polynomial.
- Write all you know about... (exponents, the Cartesian plane, triangles, etc.)
- How many squares are there on a chess board? Describe your strategy for solving this problem.
- Describe the mathematics seen in a photograph of your choice.
- Write a solve-a-word problem whose solution involves multiplying/dividing two or more fractions.
- Find a shortcut for adding the numbers between 1 and 100.
- Explain the Pythagorean theorem. How could it be used to remember the distance formula?
- Compare and contrast the terms *median*, *altitude*, *perpendicular bisector* of a triangle.
- Explain the difference between area and perimeter.
- How many dimensions does a pencil have? Explain your answer.
- Why can't you divide by zero?
- How can you find a number with 13 factors?
- What is a prime number?
- How can you tell which is the larger of two fractions?
- What is scientific notation?
- Distinguish between congruent and similar triangles.
- Why do we need "proofs" in mathematics?

Process Prompts

- The most important part of solving a problem is...
- What does it mean to "solve" an equation?
- Write instructions for someone in Grade 5 to follow when... (adding fractions, finding percent, calculating averages, etc.)
- Write a lesson plan about how you would teach a specific math topic.
- Find something you learned today that is similar to something that you already knew. Write about these similarities.
- Do you use tables or diagrams when solving problems? Why/why not?
- You know several ways to... (solve an equation, factor a quadratic, etc.). Which method is your favourite? Why?
- Write a multiple choice question about... and explain how each of the wrong answers could be logical.
- How important is being neat and organized in general and when you are doing math?
- When I study for a test, I...
- Write a letter to your teacher explaining what you understand about the topic and what needs to be clarified.
- When I read a math textbook and see a word that I don't know, I...
- The key idea of the lesson today was...
- Describe the graph of... as if you were explaining it to a friend over the phone.
- When I see a word problem, the first thing I do is... then I...
- Write a word problem using 'OF.' What does 'OF' mean as a math procedure?
- What are the benefits of journal writing for mathematics classes?
- How could journal writing be changed to be more effective?
- Do you make corrections and/or ask questions about a returned test? Why/why not?
- Describe any computational procedure that you invented.
- Write a possible test question for this unit.
- What is the most significant thing that you learned in math class today?
- What questions were still unanswered at the end of class today?
- Describe the discoveries you have made about mathematics (patterns, relationships, procedures, etc.)
- Answer questions under the headings: WHO, WHAT, WHERE, WHEN, WHY,

Affective/Attitudinal Prompts

- My best kept secret about math is...
- Write a letter to the newspaper explaining why math education should be emphasized.
- My parents feel that math is...
- I want to become better at math so that I...
- People who are good at math...
- My best/worst experience with math was...
- When it comes to math I find it difficult to...
- When I hear someone say "Math is fun!" I...
- Draw a picture of a mathematician and describe what s/he does.
- If I were better at math, I would...
- How do you feel about showing your work on the board?
- Draw a cartoon of the "Math Monster." What is s/he saying to you?
- Write a letter to a student who will take this class next year, giving some advice about how to be successful.
- Design two mathematical bumper stickers, one serious and one funny.
- My three personal goals in math this term are...